

COMMONWEALTH of VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY PIEDMONT REGIONAL OFFICE

Molly Joseph Ward Secretary of Natural Resources 4949A Cox Road, Glen Allen, Virginia 23060 (804) 527-5020 Fax (804) 527-5106 www.deq.virginia.gov

David K Paylor Director

Michael P Murphy Regional Director

November 4, 2015

Mr. Anthony L. Baker Senior Manager Philip Morris USA Inc. – Park 500 Complex P.O. Box 26603 Richmond, VA 23261

Location: Chesterfield County

Registration No: 50722

Dear Mr. Baker:

Attached is a renewal Title V permit to operate your tobacco processing facility pursuant to 9 VAC 5 Chapter 80 of the Virginia Regulations for the Control and Abatement of Air Pollution.

This permit contains legally enforceable conditions. Failure to comply may result in a Notice of Violation and civil penalty. <u>Please read all conditions carefully.</u>

This approval to operate does not relieve Philip Morris USA Inc. of the responsibility to comply with all other local, state, and federal permit regulations.

Issuance of this permit is a case decision. The <u>Regulations</u>, at 9 VAC 5-170-200, provide that you may request a formal hearing from this case decision by filing a petition with the Board within 30 days after this permit is mailed or delivered to you. Please consult that and other relevant provisions for additional requirements for such requests.

Additionally, as provided by Rule 2A:2 of the Supreme Court of Virginia, you have 30 days from the date you actually received this permit or the date on which it was mailed to you, whichever occurred first, within which to initiate an appeal to court by filing a Notice of Appeal with:

David K. Paylor, Director Department of Environmental Quality P.O. Box 1105 Richmond, Virginia 23218-1105

In the event that you receive this permit by mail, three days are added to the period in which to file an appeal. Please refer to Part Two A of the Rules of the Supreme Court of Virginia for additional information including filing dates and the required content of the Notice of Appeal.

If you have any questions concerning this permit, please contact Alison Sinclair at (804) 527-5155.

Sincerely,

Kyle Ivar Winter, P.E. Deputy Regional Director

Attachment: Permit

The following federal regulations can be found at:

http://www.gpo.gov/fdsys/search/showcitation.action

Title 40, Chapter I, Subchapter C

40 CFR 60 Subpart Db

40 CFR 60 Subpart Dc

40 CFR 60 Subpart IIII

40 CFR 63 Subpart ZZZZ

40 CFR 63 Subpart JJJJJJ

cc: Air Inspector, DEQ Air Compliance

Chief, Permits and Technical Assessment Branch (3AP11), U.S. EPA, Region III



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Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name:

Philip Morris USA Inc.

Facility Name:

Philip Morris USA Inc. – Park 500 Complex

Facility Location:

4100 Bermuda Hundred Road

Chester, VA 23836-3245

Registration Number:

50722

Permit Number:

PRO50722

This permit includes the following programs:

Federally Enforceable Requirements - Clean Air Act (Conditions 1 through 139)

November 4, 2015

Effective Date

November 3, 2020

Expiration Date

Kyle Ivar Winter, P.E., Deputy Regional Director

04 NOVEMBER 7018

Signature Date

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Facility Information

Permittee

Philip Morris USA Inc. P.O. Box 26603 Richmond, VA 23261

Responsible Official

Mr. Anthony L. Baker Senior Manager

Facility

Philip Morris USA Inc. – Park 500 Complex 4100 Bermuda Hundred Road Chester, VA 23836-3245

Contact Person

Mr. Maurice Chemweno Senior Environmental Engineer Altria Client Services 804 -335-2943

County-Plant Identification Number: 51-041-0081

Facility Description: NAICS 312230 - Tobacco manufacturing, including SIC 2141 Tobacco stemming and redrying, manufacture of reconstituted tobacco.

RL Plant:

The Reconstituted Leaf (RL) process uses tobacco components that are blended and pulped to form a slurry which is dried in a series of dryers that form the pulp into a sheet. The sheet is cut and packed to be distributed to cigarette manufacturing facilities.

BL Plant:

The Blended Leaf (BL) process grinds tobacco components and adds liquid to form a slurry. A tobacco sheet is formed on a dryer belt. The sheet is dried by natural gas fired dryers. The sheet is then cut and packed for distribution to cigarette manufacturing facilities.

Emission Units
Equipment to be operated consists of:

FP0101 AE-FP1	BIEG0102 AE-71b	B1EG0101 AE-71a	024W2EG0 AE-W7	024W1EG0 AE-I1	Fuel Burning Equipment	RB1, RB2, AE-R1 AE-R2 AE-R3	BO0701 AE-D2	BO0302 AE-47a		RO0501 AE-38	Fuel Burning Equipment	OIII ID
Fire system emergency pump (2011)	Boiler House emergency diesel generator (1977)	Boiler House emergency diesel generator (1975)	Wastewater treatment plant diesel generator (1981)	Wastewater treatment plant diesel generator (1981)	Fuel Burning Equipment – Generators and Emergency Equipment	Temporary rental boilers (2013)	Boiler 5 - Cleaver Brooks boiler (2013)	Boiler 3 - Combustion Engineering (reconstructed 2014)	(1996)	Boiler 1 - Babcock & Wilcox boiler	Fuel Burning Equipment - Site wide Support Boilers	Manufacturer - Date of construction
237 bhp	387 bhp (260 kW)	298 bhp (200 kW)	Electrical Power 1000 kW/hr (1,490 bhp)	Electrical Power 1000 kW/hr (1,490 bhp)	ent	< 90 MMBtu/hr each natural gas	155 MMBtu/hr natural gas 145 MMBtu/hr #2 fuel oil	247 MMBtu/hr MCR* natural gas& #2 fuel oil	148.6 MMBtu/hr natural gas & LPG	143 MMBtu/hr #2 fuel oil		Capacity
None	None	None	None	None		None	None	None	Flu gas recirculation	Multicyclone D.E.** = 90%		(PCD) Description*
None	None	None	None	None		None	None	None		B1CY0101		PCDID
None	None	None	None	None		None	None	None	NOx	PM		Controlled
None	None	None	07/30/2015	07/30/2015		2/12/2014	2/12/2014	2/12/2014	10/31/14			Permit Date

Philip Morris USA Inc. Park 500 Complex
Permit Number PRO50722

None	PM	вн0201Ү	Baghouse filter D E. = 99%		2006)	RLY cyclone (2006)	AE-RLY	CY0201
as proposed in the 8/22/1977 & 9/13/1977 application	РМ	L1BH0301 L1BH0302 L2BH0301 L2BH0302	Four baghouse filters D.E. = 99%	20.67 (dry) P5FA units/hr	Pulping (pneumatic transfer) cyclones (1974 and 1977)	Pulping (pneuma (1974 and 1977)	AE-01	L1CY0101 L1CY0102 L2CY0101 L2CY0102
07/30/2015	PM	LIBH0501 & LIBH0601	Two baghouse filters D.E.= 99%	0.00107 P5BB units/hr Class Tobacco (a subset of Total Tobacco)	Blending Area d 2011)	Receiving and Blending Area (1980, 1995 and 2011)	AE-78	DC0207; BW 0301- BW0307; HM0201- HM0204; HM0101; BC0301 SP0101
				0.00403 P5BB units/hr Total Tobacco			AE-77	DC0401- DC0407; BW0401- BW0407 DC0301- DC0306;
					ant	Tobacco Processing Equipment - RL Plant	cessing Equ	Tobacco Pro
07/13/2015	None	None	None	10.8 MMBtu/hr total natural gas	Secondary dryer - 4 dryer burners	(2007)	6b, 10b, DSb	L5D2
07/13/2015	None	None	None	33.3 MMBtu/hr total natural gas	Main dryer - 9 dryer burners	Products A&B Drying Line 5	3b, 4b,	L5D1
07/13/2015	None	None	None	10.8 MMBtu/hr total natural gas	Secondary dryer - 4 dryer burners	(2007)	6a, 10a, DSa	L4D2
07/13/2015	None	None	None	33.3 MMBtu/hr total natural gas	Main dryer - 9 dryer burners	Products A&B Drying Line 4	3a, 4a,	L4D1
					ryers	it - BL Process Dryers	Equipmen	Fuel Burning Equipment
Applicable Permit Date	Pollutant Controlled	PCD ID	Pollution Control Device (PCD) Description*	Size / Rated Capacity*	Emission Unit Description Manufacturer - Date of construction	Emission Unit Description - Manufacturer - Date of cons	Stack ID	Emission Unit ID
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Philip Morris USA Inc. Park 500 Complex Permit Number PRO50722

LIPP0201, LIPP0202 L3TK4902 L3TK4901 L3TK460 LIDR0101 LIDT0101 L3MT080 L3TK4501 L2DR0101 LIDD010 L1PP0102 L1PP0101 L2DT0101 L2DD010 Emission
Unit ID Fug vents inside bldg inside AS-83 bldg AE-23 bldg Fug vent inside AE-26 AE-22 AE-10 AE-09 AE-08 AE-11 Fug vent Stack ID storage tanks (1994) 8,000 gallon (each) propylene glycol (1994)2,400 gallon holding tank (1994) Line 1 Tobacco Drying (1974) Emission Unit Description –
Manufacturer - Date of construction Dry tobacco flavoring dump station 2,400 gallon blending tank (1994) Line 2 Tobacco Drying (1974) Line 1 & 2 Packing (1974 and 1977) Capacity associated with dry flavor 4.05 tons/hr 4.05 tons/hr P5FA units/hr 53.77 (dry) Size / Rated dry flavor 740 gal/hr 1,000 lbs/hr associated with 740 gal/hr (dry) tobacco (dry) tobacco operation operation Baghouse filter D.E.= 99% None None None D.E.= 40% (VOC) D.E.= 90% (PM) Orifice scrubber D.E.=90% (PM) Orifice scrubber, D.E.=90% (PM) Orifice scrubber D.E.=90% (PM) Mechanical scrubber D.E. = 99% Dust filter, D.E. = 40% (VOC)D.E.= 40% (VOC) D.E.= 40% (VOC D.E.= 90% (PM) Mechanical scrubber, D.E.=90% (PM) Orifice scrubber D.E.= 40% (VOC) D.E.= 40% (VOC) Pollution Control Device (PCD) Description* None None None L3SF0301 L1SC030 LISC020 LISC0101 BH0701 L2SC0301 L2SC0201 L2SC0101 PCD ID None None None PM VOC PM VOC PM VOC PM VOC PM VOC PM VOC PΜ PM Controlled Pollutant 8/19/04 8/19/04 8/19/04 9/13/1977 as proposed Permit Date Applicable 8/19/04 application 9/13/1977 8/22/1977 & 8/22/1977 & application 8/22/1977 & as proposed application 9/13/1977 in the as proposed in the Page 4

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AB Pkg Fug. Products A&B Cutting, Cooling, and 1.32 (dry) BLPE None	L5D1, 3b, 4b, Products A&B Drying Line 5 (see BL L5D2 DSb Stacks) (2007) Process Dryers above for fuel-firing units/hr None	L4D1, 6a, 10a, Process Dryers above for fuel-firing Units/hr A 4, Products A&B Drying Line 4 (see BL 0.66 (dry) BLPE Units/hr	AB Slurry Fug. Products A&B Slurry Production - 2150 gal/hr None	AB Wet Fug. Products A&B Wet Ingredient Preparation- Process tanks (2007) 2000 gal/hr None	(inside)	os 	Products A&B Dry Ingredient Three baghouse filters - Preparation (2007) – receiving area, O 005 gr/cf outlet	Tobacco Processing Equipment - BL Plant	Unit ID Stack ID Emission Unit Description — Size / Rated Pollution Control Device Capacity*	
lone	Vone	lone	Vone	Vone	iix dust socks (silos) - .05 gr/cf outlet	· -	hree baghouse filters - 005 gr/cf outlet			
None	None	None	None	None	SDS1, SDS2, SDS3, SDS4, SDS5, SDS6	BH-2d, BH-2e, BH-2f	BH-2a, BH-2b, BH-2c		PCD ID	
None	None	None	None	None	PM		Pollutant Controlled			
07/13/2015	07/13/2015	07/13/2015	07/13/2015	07/13/2015	Applicable Permit Date 07/13/2015			Applicable Permit Date	1 480 5	

^{*}The Size/Rated capacity and PCD efficiency is provided for informational purposes only, and is not an applicable requirement.

** D.E.: Design Efficiency

Fuel Burning Equipment Requirements Site Wide Support Boilers

Boiler 1 (BO0501), Boiler 3 (BO0302), Boiler 5 (BO0701), and temporary rental boilers (RB1, RB2, RB3) and Products A&B Drying Lines (L4D1, L4D2, L5D1, L5D2)

Limitations

3.

- 1. Fuel Burning Equipment Requirements Boilers Limitations Emission Controls Nitrogen oxide emissions from the gas- and oil-fired boiler (BO0501) shall be controlled by the use of flue gas recirculation. The gas-and oil-fired boiler (BO0501) shall be provided with adequate access for inspection.

 (9 VAC 5-80-110 and Condition 2 of 10/31/14 Permit)
- Fuel Burning Equipment Requirements Boilers Limitations Emission Controls Sulfur dioxide emissions from the gas- and oil-fired boiler (BO0501) shall be controlled by the use of low-sulfur fuel with a sulfur content of no more than 0.486% (by weight per shipment).
 (9 VAC 5-80-110 and Condition 3 of 10/31/14 Permit)

Particulate emissions from the gas- and oil-fired boiler (BO0501) shall be controlled by the

Fuel Burning Equipment Requirements – Boilers - Limitations - Emission Controls –

use of a multicyclone.
(9 VAC 5-80-110 and Condition 4 of 10/31/14 Permit)

- 4. Fuel Burning Equipment Requirements Boilers Limitations Emission Controls Nitrogen Oxide, Volatile Organic Compound, and Carbon Monoxide emissions from the boilers (BO0302, BO0701, RB1, RB2, and RB3) shall be controlled by advanced boiler combustion design and proper operation and maintenance. The boilers shall be provided with adequate access for inspection when operating.

 (9 VAC 5-80-110 and Condition 2 of 2/12/14 Permit)
- 5. Fuel Burning Equipment Requirements Boilers Limitations Emission Controls Sulfur dioxide and Particulate Matter emissions from the dual fuel boilers (BO0302 and BO0701) shall be controlled by the use of low sulfur distillate oil and natural gas. The boilers shall be provided with adequate access for inspection when operating. (9 VAC 5-80-110 and Condition 3 of 2/12/14 Permit)
- 6. Fuel Burning Equipment Requirements Boilers Limitations Fuel The approved fuels for the gas- and oil-fired boiler (BO0501) are distillate oil, liquefied petroleum gas (LPG), and natural gas. A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-110 and Condition 5 of 10/31/14 Permit)
- 7. Fuel Burning Equipment Requirements Boilers Limitations Fuel Throughput The gas- and oil-fired boiler (BO0501) shall consume no more fuel than specified below:

Fuel	Hourly capacity	Annual limit
Natural gas (based on 1020 Btu/scf)	0.146 MMft ³ /hr	1,035 MMft ³ /yr
LP gas as butane (based on 102,000 Btu/gal)	1.457 kgal/hr	10,200 kgal/yr
Distillate oil (based on 138,000 Btu/gal)	1.036 kgal/hr	4,647 kgal/yr

In addition to the fuel limits above, if a combination of the three fuels is used, then the annual emissions of pollutants, calculated monthly as the sum of each consecutive 12-month period, shall not exceed the values that will allow <u>all</u> of the following equations to hold true:

For PM: $(X) \times (7.6 \text{ lb/MMcf}) + (Y) \times (0.8 \text{ lb/kgal}) + (Z) \times (3.3 \text{ lb/kgal}) \le 7.7 \text{ tons/yr}$ 2000 lb/ton

For PM10: $(X) \times (7.6 \text{ lb/MMcf}) + (Y) \times (0.8 \text{ lb/kgal}) + (Z) \times (2.3 \text{ lb/kgal}) \le 5.3 \text{ tons/yr}$ 2000 lb/ton

For CO: $(X) \times (84.0 \text{ lb/MMcf}) + (Y) \times (8.4 \text{ lb/kgal}) + (Z) \times (5.0 \text{ lb/kgal}) \le 43.5 \text{ tons/yr}$ 2000 lb/ton

For NOx: $(X) \times (127.5 \text{ lb/MMcf}) + (Y) \times (12.75 \text{ lb/kgal}) + (Z) \times (27.6 \text{ lb/kgal}) \le 66.0 \text{ tons/yr}$ 2000 lb/ton

For SO2: $(X) \times (0.6 \text{ lb/MMcf}) + (Y) \times (0.02 \text{ lb/kgal}) + (Z) \times (69.0 \text{ lb/kgal}) \le 160.3 \text{ tons/yr}$ 2000 lb/ton

For VOC: $(X) \times (5.5 \text{ lb/MMcf}) + (Y) \times (0.9 \text{ lb/kgal}) + (Z) \times (0.2 \text{ lb/kgal}) \le 4.6 \text{ tons/yr}$ 2000 lb/ton

Where,

X = # of million cubic feet of natural gas burned during any 12 consecutive month period;

Y = # of thousand gallons of LPG burned during any 12 consecutive month period, and

Z = # of thousand gallons of distillate oil burned during any 12 consecutive month period.

Annual fuel consumption shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-110 and Condition 6 of 10/31/14 permit)

8. Fuel Burning Equipment Requirements – Boilers - Limitations - Fuel Specifications - The distillate oil and LPG combusted in BO0501 shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for Grades 1 or 2 fuel oil.

LPG, including butane and propane, which meets ASTM specification D1835. (9 VAC 5-80-110, and Condition 7 of 10/31/14 Permit)

- 9. **Fuel Burning Equipment Requirements Boilers Limitations Fuel** The approved fuels for the dual fuel boilers (BO0302 and BO0701) are distillate oil and natural gas. A change in the fuel may require a permit to modify and operate.

 (9 VAC 5-80-110 and Condition 5 of 2/12/14 Permit)
- 10. **Fuel Burning Equipment Requirements Boilers Limitations Fuel** The approved fuel for the rental boilers (RB1, RB2, and RB3) is natural gas. A change in the fuel may require a permit to modify and operate.

 (9 VAC 5-80-110 and Condition 6 of 2/12/14 Permit)

- 11. Fuel Burning Equipment Requirements Boilers Limitations Fuel Throughput The dual fuel boilers (BO0302 and BO0701) combined shall consume no more than 1,568,000 gallons of distillate fuel oil per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

 (9 VAC 5-80-110 and Condition 7 of 2/12/14 Permit)
- 12. Fuel Burning Equipment Requirements Boilers Limitations Fuel Throughput The rental boilers (RB1, RB2, and RB3) combined shall consume no more than 464 million cubic feet of natural gas per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

 (9 VAC 5-80-110 and Condition 8 of 2/12/14 Permit)
- 13. Fuel Burning Equipment Requirements Boilers Limitations Fuel Throughput The quantities of natural gas and distillate oil for all of the boilers (BO0302, BO0701, RB1, RB2 and RB3) combined, shall not exceed values that will allow the following equation to hold true:

$$(X) \times (1,020 \text{ Btu/ft}^3) + (Y) \times (138,000 \text{ Btu/gal}) \le 3.17 \times 10^{12} \text{ Btu/yr}$$

Where,

X = Number of cubic feet of natural gas burned in a year, calculated monthly as the sum of each consecutive 12-month period

Y = Number of gallons of distillate fuel oil burned in a year, calculated monthly as the sum of each consecutive 12-month period

Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-110 and Condition 9 of 2/12/14 Permit)

14. Fuel Burning Equipment Requirements – Boilers - Limitations - Fuel - The distillate oil combusted in the dual-fuel boilers (BO0302 and BO0701) shall meet the specifications below:

LOW SULFUR DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil:

Maximum sulfur content per shipment: 0.05% (9 VAC 5-80-110 and Condition 10 of 2/12/14 Permit)

15. **Fuel Burning Equipment Requirements – Boilers - Limitations - Fuel -** The natural gas combusted in the dual-fuel boilers (BO0302 and BO0701) shall meet the definition of natural gas found in 40 CFR 60.41b.

(9 VAC 5-80-110, 40 CFR 60 Subpart D_b, and Condition 11 of 2/12/14 Permit)

- 16. **Fuel Burning Equipment Requirements Boilers Limitations Fuel Certification** The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil to be combusted in the boilers (BO0501, BO0302 and BO0701). Each fuel supplier certification shall include the following:
 - a. The name of the fuel supplier;
 - b. The date on which the distillate oil was received;
 - c. The quantity of distillate oil delivered in the shipment;
 - d. A statement that the distillate oil complies with the American Society for Testing and Materials specifications (ASTM D396) for number 2 fuel oil;
 - e. The sulfur content of the distillate oil (% by weight);

Fuel sampling and analysis, independent of that used for certification, as may be periodically required or conducted by DEQ may be used to determine compliance with the fuel specifications stipulated in Conditions 8 and 14. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits. (9 VAC 5-80-110, 40 CFR 60 Subpart D_b, Condition 8 of 10/31/14 Permit, and Condition 12 of 2/12/14 Permit)

17. Fuel Burning Equipment Requirements – Boilers - Limitations - Emission Limits – Emissions from the operation of BO0501 shall not exceed the limits specified below when firing natural gas:

Particulate Matter (filterable	e + condensable)	1.1	lbs/hr (9 VAC 5-50-260)
PM-10 (filterable + condens	sable)	1.1	lbs/hr (9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	0.125 lbs/MMBtu	18.6	lbs/hr (9 VAC 5-50-260)
Carbon Monoxide		12.2	lbs/hr (9 VAC 5-50-260)
Volatile Organic Compounds		0.8	lbs/hr (9 VAC 5-50-260)

(9 VAC 5-80-110, and Condition 9 of 10/31/14 Permit)

18. Fuel Burning Equipment Requirements – Boilers - Limitations - Emission Limits – Emissions from the operation of BO0501 shall not exceed the limits specified below when firing LP gas:

Particulate Matter (filtera	ble + condensable)	1.2	lbs/hr (9 VAC 5-50-260)
PM-10 (filterable + cond	ensable)	1.2	lbs/hr (9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	0.125 lbs/MMBtu	18.6	lbs/hr (9 VAC 5-50-260)
Carbon Monoxide		12.2	lbs/hr (9 VAC 5-50-260)

Page 10

Volatile Organic Compounds

1.3 lbs/hr (9 VAC 5-50-260)

(9 VAC 5-80-110, and Condition 10 of 10/31/14 Permit)

19. Fuel Burning Equipment Requirements – Boilers - Limitations - Emission Limits – Emissions from the operation of BO0501 shall not exceed the limits specified below when firing distillate oil:

Particulate Matter (filt	erable + condensable)	3.4	lbs/hr (9 VAC 5-50-260)
PM-10 (filterable + co	ndensable)	2.4	lbs/hr (9 VAC 5-50-260)
Sulfur Dioxide		71.5	lbs/hr (9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	0.2 lbs/MMBtu	24.9	lbs/hr (40 CFR 60 Subpart D _b)
Carbon Monoxide		5.2	lbs/hr (9 VAC 5-50-260)
Volatile Organic Compounds		0.2	lbs/hr (9 VAC 5-50-260)

(9 VAC 5-80-110 and Condition 11 of 10/31/14 Permit)

20. Fuel Burning Equipment Requirements – Boilers - Limitations - Emission Limits – Annual emissions from the operation of BO0501 shall not exceed the limits specified below:

Particulate Matter (filterable + condensable)	7.7	tons/yr (9 VAC 5-50-260)
PM-10 (filterable + condensable)	5.3	tons/yr (9 VAC 5-50-260)
Sulfur Dioxide	160.3	tons/yr (9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	66.0	tons/yr (40 CFR 60 Subpart D _b)
Carbon Monoxide	43.5	tons/yr (9 VAC 5-50-260)
Volatile Organic Compounds	4.6	tons/yr (9 VAC 5-50-260)

(9 VAC 5-80-110 and Condition 12 of 10/31/14 Permit)

21. Fuel Burning Equipment Requirements – Boilers - Limitations - Emission Limits – NO_x emissions from the operation of the dual-fuel boilers (BO0302 and BO0701) shall not exceed 0.2 lbs/MMBtu. Compliance for NO_x from BO0302 and BO0701 shall be based on 30-day rolling average as determined by CEMS. The NO_x emission standard under 40 CFR 60.44_b applies at all times.

(9 VAC 5-80-110, 40 CFR Subpart D_b, and Condition 14 of 2/12/14 Permit)

22. Fuel Burning Equipment Requirements – Boilers - Limitations - Emission Limits – Hourly emissions from the operation of the boilers listed below shall not exceed the following limits (9 VAC 5-50-260):

Hourly Emissions (lb/hr)	BO0302	BO0701	RB1, RB2, RB3
			(each boiler)
Particulate Matter (PM) (filterable only)	3.6	2.1	0.2
PM ₁₀ (including condensable PM)	4.2	2.5	0.7
PM 25 (including condensable PM)	2.8	1.7	0.7
Sulfur Dioxide	12.8	7.5	0.1
Nitrogen Oxides(as NO ₂)	46.1	28.9	8.9
Carbon Monoxide	19.3	11.4	7.5
Volatile Organic Compounds	1.4	0.9	0.5

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits.

(9 VAC 5-80-110 and Condition 15 of 2/12/14 Permit)

23. Fuel Burning Equipment Requirements – Boilers - Limitations - Boiler Emission Limits – Annual emissions from the operation of the boilers (BO0302, BO0701, RB1, RB2, and RB3) shall not exceed the limits specified below:

Particulate Matter (PM) (filterable only)	4.4	tons/yr (9 VAC 5-50-260)
PM-10 (including condensable PM)	12.8	tons/yr (9 VAC 5-50-260)
PM2.5 (including condensable PM)	12.2	tons/yr (9 VAC 5-50-260)
Sulfur Dioxide	6.5	tons/yr (9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	294.8	tons/yr (9 VAC 5-50-260)
Carbon Monoxide	102.2	tons/yr (9 VAC 5-50-260)
Volatile Organic Compounds	8.6	tons/yr (9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 11, 12, and 13.(9 VAC 5-80-110 and Condition 16 of 2/12/14 Permit)

24. Fuel Burning Equipment Requirements – Boilers - Limitations - Visible Emissions Limit – Visible Emissions from the gas- and oil-fired boiler (BO0501) shall not exceed 20 percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 27 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, or malfunction.

(9 VAC 5-80-110, 40 CFR 60 Subpart D_b, and Condition 13 of 10/31/14 Permit)

- 25. Fuel Burning Equipment Requirements Boilers Limitations Visible Emission Limit Visible emissions from each of the boilers (BO0302, BO0701, RB1, RB2, and RB3) shall not exceed 10 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

 (9 VAC 5-80-110 and Condition 17 of 2/12/14 Permit)
- 26. Fuel Burning Equipment BL Dryers Limitations Fuel The approved fuel for Products A&B Drying Line 4 and Line 5 (L4D1, L4D2, L5D1, L5D2) is natural gas. A change in the fuel may require a permit to modify and operate.

 (9 VAC 5-80-110 and Condition 5 of 07/13/2015 Permit)
- 27. Fuel Burning Equipment BL Dryers Limitations Fuel Throughput Products A&B Drying Line 4 and Line 5 (L4D1, L4D2, L5D1, L5D2) shall consume no more than 572.7 x 10⁶ cubic feet of natural gas per year (combined), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110 and Condition 6 of 07/13/2015 Permit)
- 28. Fuel Burning Equipment BL Dryers Limitations Emission Limits Emissions from the operation of Products A&B Drying Line 4 and Line 5 (L4D1, L4D2, L5D1, L5D2) (per line) shall not exceed the limits specified below:

 Nitrogen Oxides
 4.3 lbs/hr
 14.3 tons/yr (9 VAC 5-50-260)

 Carbon Monoxide
 3.6 lbs/hr
 12.0 tons/yr (9 VAC 5-50-260)

(Emissions of PM10, PM2.5, and VOC from fuel throughput to the Products A&B Dryers are combined with the process emissions from tobacco throughput for Products A&B in Condition 89).

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 26 and 27.

(9 VAC 5-80-110 and Condition 12 of 07/13/2015 Permit)

Monitoring

29. Fuel Burning Equipment Requirements – Boilers – Monitoring - CEMS – A Continuous Emission Monitoring System (CEMS) and suitable diluent monitor (either CO₂ or O₂) shall be installed on the gas- and oil-fired boiler (BO0501). Data from the NO_x CEMS shall be used to determine compliance with the emissions standards (in lb/MMBtu) on a 30-day rolling average as specified in Conditions 17, 18, and 19. The NO_x CEMS shall be located, calibrated, and maintained in accordance with approved procedures. (9 VAC 5-80-110, 40 CFR 60.13, 40 CFR 60 Subpart D_b, 40 CFR 60 Appendix F, and Condition 16 of 10/31/14 Permit)

- 30. Fuel Burning Equipment Requirements Boilers Monitoring CEMS The NO_x monitoring system of BO0501 shall meet a minimum data availability of 90 percent of boiler operating hours on a 12-month rolling average. The NO_x monitoring system shall also meet the quality assurance requirements of 40 CFR Part 60, Appendix F. (9 VAC 5-80-110, 40 CFR 60 Subpart D_b, and Condition 17 of 10/31/14 Permit)
- 31. Fuel Burning Equipment Requirements Boilers Monitoring CEMS Data The continuous monitoring data generated by the NO_λ monitor of BO0501 may, at the discretion of the Board, be used as evidence of violation of the emission standard. These data shall be kept on file and made available to the Department upon request. (9 VAC 5-80-110, 40 CFR 60.11(g), and Condition 18 of 10/31/14 Permit)
- 32. Fuel Burning Equipment Requirements Boilers Monitoring CEMS CEMS meeting the design specifications of 40 CFR Part 60, Appendix B, shall be installed to measure and record the emissions of NO_x from the boilers (BO0302 and BO0701) as lbs/MMBtu. The CEMS shall be installed, calibrated, maintained, audited and operated in accordance with the requirements of 40 CFR 60.13, Part D_b and Appendix B or DEQ approved procedures which are equivalent to the requirements of 40 CFR 60.13 and Appendix B. Data shall be reduced to 30 day rolling averages.

 (9 VAC 5-80-110, 40 CFR 60 Subpart D_b, and Condition 18 of 2/12/14 Permit)
- 33. Fuel Burning Equipment Requirements Boilers Monitoring CEMS Quality Control Program A CEMS quality control program which meets the requirements of 40 CFR 60.13 and Appendix B or is equivalent to the requirements of 40 CFR 60.13 and Appendix B shall be implemented for all continuous monitoring systems.

 (9 VAC 5-80-110, 40 CFR 60 Subpart D_b, and Condition 20 of 2/12/14 Permit)
- 34. Fuel Burning Equipment Requirements Boilers Monitoring An annual inspection shall be conducted on the multicyclone for BO0501 by the permittee to ensure structural integrity.
 (9 VAC 5-80-110 and Condition 4 of 10/31/14 Permit)

Recordkeeping and Reporting

- 35. Fuel Burning Equipment Requirements Boilers Recordkeeping On Site Records The permittee shall maintain records of all emission data and operating parameters for BO0501 necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - a. Monthly consumption of natural gas, liquefied petroleum gas and/or distillate oil. Annual fuel consumption shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. All fuel supplier certifications.

- c. Annual emissions calculations for sulfur dioxide, nitrogen oxides, carbon monoxide and particulate matter from the gas- and oil-fired boiler (BO0501) using calculation methods approved by the Director, Piedmont Regional Office to verify compliance with the emissions limitations in Condition 20. Annual emissions shall be calculated monthly as the sum of each consecutive 12-month period.
- d. CEM records
- e. Quarterly and semiannual excess emission reports for NO_x monitoring.
- f. Annual internal inspection results on the multicyclone.
- g. Records of all malfunctions of equipment which would cause a violation of any part of this permit.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, 40 CFR 60 Subpart D_b, and Condition 19 of 10/31/14 Permit)

- 36. Fuel Burning Equipment Requirements Boilers Recordkeeping On Site Records The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:
 - a. For the rental boilers (RB1, RB2, and RB3) monthly and annual consumption of natural gas, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. For the dual fuel boilers (BO0302 and BO0701) daily, monthly and annual consumption of each fuel, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Annual heat input from all boilers (BO0302, BO0701, RB1, RB2, and RB3) from all fuels (combined) shall be calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - d. All fuel supplier certifications.
 - e. Continuous monitoring system calibrations and calibration checks and excess emissions.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, 40 CFR 60 Subpart D_b, 40 CFR 60 Subpart D_c, and Condition 25 of 2/12/14 Permit)

37. Fuel Burning Equipment Requirements – BL Dryers – Recordkeeping - On Site Records - The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to the annual consumption of natural gas by Products A&B Drying - Line 4 and Line 5, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 19a of 7/13/2015 Permit)

38. Fuel Burning Equipment Requirements – Boilers – Reporting - Initial Notifications - The permittee shall furnish written notification to the Piedmont Region of the actual start-up date of the rental boilers (RB1, RB2, and RB3) within 15 days after such date. Copies of the written notification referenced above are to be sent to:

Associate Director

Office of Air Enforcement and Compliance Assistance (3AP20)

U.S. Environmental Protection Agency

Region III

1650 Arch Street

Philadelphia, PA 19103-2029

(9 VAC 5-80-110 and Condition 26 of 2/12/14 Permit)

- 39. Fuel Burning Equipment Requirements Boilers Reporting Excess Emission Reports The permittee shall furnish written reports to the Piedmont Office of excess emissions from any process (BO0302, BO0501, BO0701) monitored by a continuous monitoring system (CEMS) on a quarterly basis, postmarked no later than the 30th day following the end of the calendar quarter. These reports shall include, but are not limited to the following information:
 - a. The magnitude of excess emissions, any conversion factors used in the calculation of excess emissions, and the date and time of commencement and completion of each period of excess emissions;
 - b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the process, the nature and cause of the malfunction (if known), the corrective action taken or preventative measures adopted;
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and

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d. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in that report.

All quarterly and semiannual monitoring reports shall conform to the Continuous Emission Monitoring System Report Format approved by the Piedmont Regional Office. (9 VAC 5-80-110, 40 CFR 60 Subpart D_b, Condition 20 of 10/31/14 Permit and Condition 24 of 2/12/14 Permit)

- 40. Fuel Burning Equipment Requirements Boilers Reporting Fuel Quality Reports The permittee shall submit fuel quality reports for BO0302, BO0501, and BO0701 to the Director, Piedmont Regional Office, postmarked no later than the 30th day following the end of each semiannual period ending June 30th and December 31st. If no shipments of distillate oil were received during the semiannual period, the fuel quality report shall consist of the dates included in the semiannual period and a statement that no distillate oil was received during the semiannual period. If distillate oil was received during the reporting period, the report shall include:
 - a. The dates included in the semiannual period;
 - b. A copy of all fuel supplier certifications for all shipments of distillate oil received during the reporting period, indicating the supplier, volume of shipment, sulfur content (weight percent) and date the shipment was received; and,
 - c. A signed statement from the owner or operator of the facility that the fuel supplier certifications represent all of the distillate oil received during the reporting period.

One copy of the semiannual fuel report shall be submitted to:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(9 VAC 5-80-110, 40 CFR 60 Subpart D_b, and Condition 21 of 10/31/14 Permit)

Testing

41. Fuel Burning Equipment Requirements – Boilers – Testing - Continuing Compliance - Visible Emissions Evaluation - Upon request by the DEQ, the permittee shall conduct additional visible emission evaluations from the gas- and oil-fired boiler (BO0501) to demonstrate compliance with the visible emission limits contained in Condition 24. The details of the tests shall be arranged with the Piedmont Regional Office. (9 VAC 5-80-110 and Condition 15 of 10/31/14 Permit)

Requirements by Reference

42. Fuel Burning Equipment – Boilers – Requirements by Reference - Federal Requirements – The boilers (BO0501, BO0302, BO0701, RB1, RB2, and RB3) are subject to Federal Regulations, as noted. The requirements may include, but are not limited to, the following:

Unit	Description	NSPS Citation	MACT Citation
BO0501	Babcock & Wilcox Boiler (natural gas, LP gas and #2 fuel oil) – 1996	40 CFR 60.42b (SO ₂ standard) 40 CFR 60.45b (SO ₂ testing) 40 CFR 60.43b (PM standard) 40 CFR 60.44b (NOx standard) 40 CFR 60.46b (PM/NO _x testing)	Existing boiler at an area source 40 CFR 63.11201 (standards) 40 CFR 63.11205 (compliance)
BO0302	Combustion Engineering Boiler (#2 fuel oil and natural gas) – 2014	40 CFR 60.42b (SO ₂ standard) 40 CFR 60.45b (SO ₂ testing) 40 CFR 60.43b (PM standard) 40 CFR 60.44b (NOx standard) 40 CFR 60.46b (PM/NO _x testing)	New oil boiler at an area source 40 CFR 63.11201 (emission standards) 40 CFR 63.11205 (compliance)
BO0701	Cleaver Brooks Boiler (#2 fuel oil and natural gas) - 2013	40 CFR 60.42b (SO ₂ standard) 40 CFR 60.45b (SO ₂ testing) 40 CFR 60.43b (PM standard) 40 CFR 60.44b (NOx standard) 40 CFR 60.46b (PM/NO _x testing)	New oil boiler at an area source 40 CFR 63.11201 (emission standards) 40 CFR 63.11205 (compliance)
RB1, RB2, RB3	Temporary rental boilers (natural gas) - 2013	40 CFR 60.42c (SO ₂ standard) 40 CFR 60.44c (SO ₂ testing) 40 CFR 60.43c (PM standard) 40 CFR 60.45c (PM testing)	40 CFR 63.11195 (applicability) – not subject to MACT Subpart JJJJJJ

(40 CFR 60 Subpart D_b, 40 CFR 60 Subpart D_c, 40 CFR 63, Subpart JJJJJJ, and 9 VAC 5-80-110)

- 43. Fuel Burning Equipment Requirements Boilers Requirements by Reference Except where this permit is more restrictive than the applicable requirement, all MACT Subpart JJJJJJ equipment shall be operated in compliance with the requirements of 40 CFR Part 63, Subpart JJJJJJ and 9 VAC 5-80-110)
- 44. Fuel Burning Equipment Requirements Boilers Requirements by Reference Except where this permit is more restrictive than the applicable requirement, all NSPS Subpart D_b and D_c equipment shall be operated in compliance with the requirements of 40 CFR Part 60, Subpart D_b or D_c, as applicable.
 (40 CFR 60 Subpart D_b, 40 CFR 60 Subpart D_c, 9 VAC 5-80-110, Condition 13 of 2/12/14 permit, and Condition 14 of 10/31/14 permit)

Fuel Burning Equipment - Generators and Emergency Equipment

Wastewater Treatment Plant Emergency Generators (024W1EG0101, 024W2EG0101); Boilerhouse Emergency Generators (B1EG0101, B1EG0102), and Emergency Fire Pump (FP0101)

Limitations

45. Fuel Burning Equipment –Generators and Emergency Equipment Fuel Burning Equipment – Generators and Emergency Equipment - Fuel - The approved fuel for the two emergency CI generators (024W1EG0101 and 024W2EG0101) located at the Wastewater Treatment Plant is distillate oil. A change in the fuel may require a permit to modify and operate.

(9 VAC 5-80-110 and Condition 5 of 07/30/2015 Permit)

46. Fuel Burning Equipment – Generators and Emergency Equipment - Fuel - The two emergency CI generators (024W1EG0101 and 024W2EG0101) located at the Wastewater Treatment Plant shall consume no more than 65,880 gallons of distillate oil per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-110 and Condition 6 of 07/30/2015 Permit)

47. Fuel Burning Equipment –Generators and Emergency Equipment - Fuel - The distillate oil used in the two emergency CI generators (024W1EG0101 and 024W2EG0101) shall meet the specifications below:

DISTILLATE OIL which meets the ASTM D396 specification for numbers 1 or 2 fuel oil or the ASTM D975 specification for numbers 1 or 2 diesel oil:

Maximum sulfur content per shipment: 0.0015%

(9 VAC 5-80-110 and Condition 7 of 07/30/2015 Permit.)

- 48. Fuel Burning Equipment –Generators and Emergency Equipment Fuel Certification The permittee shall obtain a fuel analysis from the fuel supplier with each shipment of distillate oil used in the two emergency CI generators (024W1EG0101 and 024W2EG0101). Each fuel supplier fuel analysis shall include the sulfur content of the distillate oil; fuel sampling and analysis, independent of that done by the fuel supplier, as may be periodically required or conducted by DEQ, may be used to determine compliance with the fuel specifications stipulated in Condition 47. Exceedance of these specifications may be considered credible evidence of the exceedance of emission limits. (9 VAC 5-80-110 and Condition 8 of the 07/30/2015 Permit)
- 49. Fuel Burning Equipment Generators and Emergency Equipment Emission Limits Emissions from the operation of the two emergency CI generators located at the Wastewater and Water Treatment Plants (024W1EG0101 and 024W2EG0101) shall not exceed the limits specified below:

Particulate Matter (PM)

1.3 lbs/hr

0.4 tons/yr (9 VAC 5-50-260)

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				rage 17
PM-10	1.3	lbs/hr	0.3	tons/yr (9 VAC 5-50-260)
PM-2.5	1.0	lbs/hr	0.3	tons/yr (9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	65.3	lbs/hr	16.4	tons/yr (9 VAC 5-50-260)
Carbon Monoxide	17.4	lbs/hr	4.4	tons/yr (9 VAC 5-50-260)
Volatile Organic Compounds	2.1	lbs/hr	0.6	tons/yr (9 VAC 5-50-260)

(9 VAC 5-80-110 and Condition 10 of 07/30/2015 Permit)

50. Fuel Burning Equipment -Generators and Emergency Equipment - Visible Emissions Limit - Visible emissions from the two emergency CI generators located at the Wastewater Treatment Plant (024W1EG0101 and 024W2EG0101) shall not exceed 20 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-80-110, and Condition 12 of 07/30/2015 Permit)

Monitoring

- 51. Fuel Burning Equipment Generators and Emergency Equipment Monitoring The emissions from the two emergency CI generators (024W1EG0101 and 024W2EG0101) shall be observed visually at least once a month for at least a brief time period during normal operations to determine if there are normal visible emissions from each (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on each emissions unit/source. The permittee shall maintain a log noting:
 - a. whether any air emissions (except for water vapor) were visible from the stack,
 - b. all emission points from which visible emissions occurred, and
 - c. whether the visible emissions were normal for the process.

Each emissions unit/source observed having above normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.

(9 VAC 5-80-110 E and F)

Recordkeeping

52. Fuel Burning Equipment – Generators and Emergency Equipment – Recordkeeping – The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:

- a. The annual consumption of distillate oil for the two emergency CI generators located at the Wastewater Treatment Plant (024W1EG0101 and 024W2EG0101), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
- b. Distillate oil shipments purchased, indicating the sulfur content per shipment.
- c. Results of visual emissions observations or 40 CFR 60, Appendix A Method 9 visible emission evaluation as required in Conditions 50.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 14 of 07/30/2015 Permit)

Requirements by Reference

- Fuel Burning Equipment –Generators and Emergency Equipment Requirements by Reference—Except where this permit is more restrictive than the applicable requirement, all MACT, Subpart ZZZZ equipment (024W1EG0101, 024W2EG0101, B1EG0101, B1EG0102, and FP0101) shall be operated in compliance with the requirements of 40 CFR Part 63, Subpart ZZZZ. (9 VAC 5-80-110)
- 54. Fuel Burning Equipment –Generators and Emergency Equipment Requirements by Reference Except where this permit is more restrictive than the applicable requirement, all NSPS, Subpart IIII equipment (FP0101) shall be operated in compliance with the requirements of 40 CFR Part 60, Subpart IIII. (9 VAC 5-80-110)
- 55. Fuel Burning Equipment Generators and Emergency Equipment Federal Requirements The diesel emergency generators and fire pump (024W1EG0101, 024W2EG0101, B1EG0101, B1EG0102, and FP0101) are subject to Federal Regulations, as noted. The requirements are as follows:

MACT ZZZZ -National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

Unit	Size	Year	Citation	Requirement
024W1EG0101 (diesel)	1490 hp	1981	40CFR63.6590(b)(3)	An existing RICE at a major source of HAP – no
				initial notification or other standard
024W2EG0101 (diesel)	1490 hp	1981	40CFR63.6590(b)(3)	An existing RICE at a major source of HAP – no
				initial notification or other standard
B1EG0101 (diesel)	298 hp	<1995	40CFR63.6590(b)(3)	An existing RICE at a major source of HAP – comply
				with Table 2c of Subpart ZZZZ, install non-resettable
				hour meter, follow work or management practices.
B1EG0102 (diesel)	298 hp	<1995	40CFR63.6590(b)(3)	An existing RICE at a major source of HAP – comply
İ				with Table 2c of Subpart ZZZZ, install non-resettable
				hour meter, follow work or management practices.

Unit	Size	Year	Citation	Requirement
FP0101 (diesel)	237 hp	2011	40CFR63.6590(c)	A new RICE < 500 hp at a major source of HAP –
				meet the requirements of 40 CFR 60 Subpart IIII,
				including burning fuel with 15 ppm sulfur and
				installing a non-resettable hour meter.

NSPS IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Unit	Size	Year	Citation	Requirement
024W1EG0101 (diesel)	1490 hp	1981	NA	An existing RICE is not applicable to NSPS IIII.
024W2EG0101 (diesel)	1490 hp	1981	NA	An existing RICE is not applicable to NSPS IIII.
B1EG0101 (diesel)	298 hp	<1995	NA	An existing RICE is not applicable to NSPS IIII.
B1EG0102 (diesel)	298 hp	<1995	NA	An existing RICE is not applicable to NSPS IIII.
FP0101 (diesel)	237 hp	2011	40CFR60.4205(c)	A new fire pump RICE <30 liters per cylinder, must
				be certified as meeting emission standards for
				NMHC+NOx and PM in Table 4 of Subpart IIII.

(9 VAC 5-80-110; 40 CFR 60, Subpart IIII; and 40 CFR 63, Subpart ZZZZ)

Tobacco Processing Equipment - RL Plant

Receiving and Blending Area (DC0401 to DC0407, BW0401 to BW0407, DC0301 to DC0306, DC0207, BW0301 to BW0307, HM0201 to HM0204, HM0101, BC0301, SP0101, and SP0102); Pulping (L1CY0101, CY0201, L1CY0102, L2CY0101, L2CY0102), Line 1 and Line 2 Tobacco Drying (L1DD0101, L1DT0101, L1DR0101and L2DD0101, L2DT0101, L2DR0101), and Line 1 and Line 2 Packing (L1PP0101 & L1PP0102, L1PP0201 & L1PP0202); Dry Tobacco Flavoring Operation - Dry Flavoring Dump Station (L3TK4601), Blending and Holding Tanks (L3TK4501, L3MT0801) and two propylene glycol storage tanks (TK4901 & TK4902).

Limitations

- 56. Tobacco Processing Equipment RL Plant Limitations- Emission Controls Particulate emissions from the Receiving and Blending Area equipment (DC0401 to DC0407, BW0401 to BW0407, DC0301 to DC0306, DC0207, BW0301 to BW0307, HM0201 to HM0204, HM0101, BC0301, SP0101, and SP0102) shall be controlled by two baghouses (L1BH0501 & L1BH0601). The baghouses shall be provided with adequate access for inspection and shall be in operation when the equipment is operating. (9 VAC 5-80-110 and Condition 2 of 07/30/2015 Permit)
- 57. Tobacco Processing Equipment RL Plant Limitations Emission Controls Particulate Matter emissions from the Pulping Area (L1CY0101, L1CY0102, L2CY0101, L2CY0102, CY0201) shall be controlled by five baghouses (L1BH0301, L1BH0302, L2BH0301, L2BH0302 and BH0201Y).
 (9 VAC 5-80-110 and as proposed in the 8/22/1977 & 9/13/1977 applications for Line 1 & Line 2 process equipment)
- 58. Tobacco Processing Equipment RL Plant Limitations Emission Controls Particulate Matter emissions from the Line 1 and Line 2 Tobacco Drying Lines (L1DD0101, L1DT0101, L1DR0101, L2DD0101, L2DT0101, L2DR0101) shall be controlled by wet scrubbers (L1SC0101, L1SC0201, L1SC0301, L2SC0101, L2SC0201 and L2SC0301).
 - (9 VAC 5-80-110 and as proposed in the 8/22/1977 & 9/13/1977 applications for Line 1 & Line 2 process equipment)

- Tobacco Processing Equipment RL Plant Limitations Emission Controls -Particulate Matter emissions from the Line 1 and Line 2 Packing Area (L1PP0101, L1PP0102, L1PP0201, L1PP0202) shall be controlled by a baghouse (BH0701). ((9 VAC 5-80-110 and as proposed in the 8/22/1977 & 9/13/1977 applications for Line 1 & Line 2 process equipment)
- Tobacco Processing Equipment RL Plant Limitations Emission Controls -Particulate emissions from the Dry Flavoring Dump Station (L3TK4601) shall be controlled by a fabric filter (L3SF0301). (9 VAC 5-80-110 and Condition 3 of 8/19/04 Permit)
- Tobacco Processing Equipment RL Plant Limitations Processing The Receiving and Blending Area equipment (DC0401 to DC0407, BW0401 to BW0407, DC0301 to DC0306, DC0207, BW0301 to BW0307, HM0201 to HM0204, HM0101, BC0301, SP0101, and SP0102) shall process no more than 21.48 dry tobacco process P5BB units per year (including a maximum Class tobacco throughput of 4.55 dry tobacco process P5BB units per year), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - (9 VAC 5-80-110 and Condition 4 of 07/30/2015 Permit)
- 62. Tobacco Processing Equipment RL Plant Limitations Throughput The Dry Flavoring Dump Station (L3TK4601) shall consume no more than 350,000 pounds per year of dry flavor ingredient, calculated as the sum of each consecutive twelve (12) month period.
 - (9 VAC 5-80-110 and Condition 5 of 8/19/04 Permit)
- Tobacco Processing Equipment RL Plant Limitations Throughput The annual throughput of propylene glycol associated with the Dry Tobacco Flavoring Operation (L3TK4601, L3TK4501, L3MT0801, TK4901 & TK4902) shall not exceed 365,000 gallons, calculated as the sum of each consecutive 12-month period. (9 VAC 5-80-110 and Condition 6 of 8/19/04 Permit)
- Tobacco Processing Equipment RL Plant Limitations Emission Limits Emissions from the operation of the consolidated Receiving and Blending Area (DC0401 to DC0407, BW0401 to BW0407, DC0301 to DC0306, DC0207, BW0301 to BW0307, HM0201 to HM0204, HM0101, BC0301, SP0101, and SP0102) shall not exceed the limits specified below:

Particulate Matter (PM)	1.4 lbs/hr	3.4 tons/yr (9 VAC 5-50-260)
PM-10	0.4 lbs/hr	0.9 tons/yr (9 VAC 5-50-260)
Volatile Organic Compounds	3.6 lbs/hr	9.5 tons/yr (9 VAC 5-50-260)

(9 VAC 5-80-110 and Condition 11 of 07/30/2015 Permit)

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65. Tobacco Processing Equipment - RL Plant - Limitations - Emission Limits - Emissions from the operation of the Dry Tobacco Flavoring Operation (L3TK4601, L3TK4501, L3MT0801, TK4901 & TK4902) shall not exceed the limits specified below:

Particulate Matter	0.1 lbs/hr	0.5 tons/yr (9 VAC 5-50-260)
PM-10	0.1 lbs/hr	0.5 tons/yr (9 VAC 5-50-260)
Volatile Organic Compounds	0.4 lbs/hr	1.6 tons/yr (9 VAC 5-50-260)

(9 VAC 5-80-110 and Condition 7 of 8/19/04 Permit)

- 66. Tobacco Processing Equipment RL Plant Limitations Visible Emissions Limit Visible emissions from the Pulping Area baghouses (L1BH0301, L1BH0302, L2BH0301, L2BH0302 & BH0201Y); Line 1 and Line 2 Tobacco Drying wet scrubbers (L1SC0101, L1SC0201, L1SC0301, L2SC0101, L2SC0201 & L2SC0301); and Line 1 and Line 2 Packing baghouse (BH0701) shall not exceed 20 percent opacity except during one sixminute period in any one hour in which visible emissions shall not exceed 30 percent opacity, as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction. (9 VAC 5-50-80, 9 VAC 5-80-110)
- 67. Tobacco Processing Equipment RL Plant Limitations Visible Emissions Limit Visible emissions from the Receiving and Blending baghouses (L1BH0501 & L1BH0601) shall not exceed 10 percent opacity as determined by EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110, and Condition 13 of 07/30/2015 Permit)

68. Tobacco Processing Equipment - RL Plant - Limitations - Visible Emissions Limit - Visible emissions from the fabric filter for the Dry Tobacco Dump Station (L3TK4601) shall not exceed 5 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110 and Condition 8 of 8/19/04 Permit)

Monitoring

69. **Tobacco Processing Equipment - RL Plant -Monitoring -** The fabric filters (baghouses) for the Receiving and Blending Area (L1BH0501 & L1BH0601) and Dry Flavoring Dump Station (L3SF0301) shall each be equipped with devices to continuously measure the differential pressure drop across the fabric filter (baghouse). Each monitoring device shall be installed, maintained, calibrated and operated in accordance with approved procedures which shall include, as a minimum, the manufacturer's written requirements or recommendations. Each monitoring device shall be provided with adequate access for inspection and shall be in operation when the fabric filters (baghouses) are operating. (9 VAC 5-80-110, Condition 3 of 8/19/04 Permit, and Condition 3 of 07/30/2015 Permit)

- 70. Tobacco Processing Equipment RL Plant -Monitoring The baghouses and wet scrubbers for the Pulping Area (L1BH0301, L1BH0302, L2BH0301, L2BH0302 and BH0201Y); Line 1 and Line 2 Tobacco Drying Lines (L1SC0101, L1SC0201, L1SC0301, L2SC0101, L2SC0201 and L2SC0301); and Line 1 and Line 2 Packing Area (BH0701) shall be provided with adequate access for inspection and shall be in operation when the corresponding process is operating. (9 VAC 5-80-110)
- 71. Tobacco Processing Equipment RL Plant Monitoring The emissions from the Pulping Area baghouses (L1BH0301, L1BH0302, L2BH0301, L2BH0302 & BH0201Y), and the Line 1 and Line 2 Tobacco Drying wet scrubbers (L1SC0101, L1SC0201, L1SC0301, L2SC0101, L2SC0201 and L2SC0301) shall be observed visually at least once a month for at least a brief time period during normal operations to determine if there are normal visible emissions from each (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on each emissions unit/source. Each emissions unit/source observed having above normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded. The permittee shall keep a log of the visible emissions observations. (9 VAC 5-80-110 E and F)
- 72. Tobacco Processing Equipment RL Plant -Monitoring The emissions from the Dry Flavoring Dump Station (L3TK4601) shall be observed visually at least once a month for at least a brief time period during normal operations to determine if there are any visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions unit. Each emissions unit observed having any visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.

 (9 VAC 5-80-110 E and F)
- 73. Tobacco Processing Equipment RL Plant -Monitoring Compliance Assurance Monitoring (CAM) The permittee shall monitor, operate, calibrate and maintain the baghouses (L1BH0501 & L1BH0601) controlling the Receiving and Blending Area; and the baghouse (BH0701) controlling the Line 1 and Line 2 Packers according to the following:

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
A visual observation is to be performed each operating day	Visible emissions from the exhaust stack of each baghouse are to be monitored daily based on EPA Method 22-like procedures.	A monitoring excursion is indicated by the presence of visible emissions. If visible emissions are observed, equipment inspections and corrective actions are conducted.
Visual observations shall be recorded each operating day.		

(9 VAC 5-80-110 E (Article 1) and 40 CFR 64.6 (c))

- Tobacco Processing Equipment RL Plant Monitoring Compliance Assurance Monitoring (CAM) - The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9. (9 VAC 5-80-110 E and 40 CFR 64.6 (c))
- Tobacco Processing Equipment RL Plant Monitoring Compliance Assurance Monitoring (CAM) - At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. (9 VAC 5-80-110 E and 40 CFR 64.7 (b))
- Tobacco Processing Equipment RL Plant Monitoring Compliance Assurance Monitoring (CAM) - Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the Receiving and Blending Area equipment and Line 1 and Line 2 Packers are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions. (9 VAC 5-80-110 E and 40 CFR 64.7 (c))
- Tobacco Processing Equipment RL Plant Monitoring Compliance Assurance Monitoring (CAM) - Upon detecting an excursion or exceedance, the permittee shall restore operation of the Receiving and Blending Area equipment and Line 1 and Line 2 Packers (including the control device and associated capture system) to their normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable. (9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))
- Tobacco Processing Equipment RL Plant Monitoring Compliance Assurance Monitoring (CAM) - Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but

is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. (9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))

- 79. **Tobacco Processing Equipment RL Plant Monitoring Compliance Assurance**Monitoring (CAM) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Piedmont Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (9 VAC 5-80-110 E and 40 CFR 64.7(e))
- 80. Tobacco Processing Equipment RL Plant -Monitoring Compliance Assurance Monitoring (CAM) If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the Receiving and Blending Area equipment and Line 1 and Line 2 Packers for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring.
 - (9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

Recordkeeping

- 81. Tobacco Processing Equipment RL Plant -Recordkeeping The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Director, Piedmont Regional Office. These records shall include, but are not limited to:
 - a. The annual throughput of total dry tobacco in P5BB process units (and Class dry tobacco process P5BB units) from the Receiving and Blending Area, calculated as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month

period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

- b. The yearly throughput of propylene glycol associated with the Dry Tobacco Flavoring Operation (L3TK4601, L3TK4501, L3MT0801, TK4901 & TK4902), calculated as the sum of each consecutive 12-month period.
- c. The annual consumption of dry flavor ingredient in the Dry Flavoring Dump Station (L3TK4601), calculated as the sum of each consecutive 12-month period.
- d. Results of visible emissions observations or 40 CFR 60, Appendix A Method 9 visible emission evaluations as required in conditions 71 and 72.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110, Condition 9 of 8/19/04 Permit, and Condition 14 of 07/30/2015 Permit)

Tobacco Processing Equipment - BL Plant

Products A&B Dry Ingredient Preparation (AB Dry); Products A&B Wet Ingredient Preparation (AB Wet), Products A&B Slurry Production (AB Slurry); Products A&B Drying Lines 4 and 5 (L4D1, L4D2, L5D1, L5D2); Products A&B Cutting, Cooling, and Packing Area (AB Pkg).

Limitations

82. Tobacco Processing Equipment - BL Plant Limitations - Emission Controls —
Particulate Matter emissions from the Products A&B Dry Ingredient Preparation (AB Dry),
shall be controlled by baghouses as follows:

Process	PCD ID	Air flow (scfm)
Receiving Area, Screening, and Classifying	BH-2a	20,000
Hammer Mills	BH-2b	5,000
Roller Grinder	BH-2c	20,000
Pneumatic Transport to Dry Mixers	BH-2d	1,500
Solid Ingredient Dump Station	BH-2e	1,500
Solid Ingredient Pneumatic Transport to Dry Mixer	BH-2f	300

(9 VAC 5-80-110 and Condition 2 of 07/13/2015 Permit)

83. Tobacco Processing Equipment - BL Plant Limitations - Emission Controls Particulate Matter emissions from the six Storage Silos in Dry Ingredient Preparation (AB Dry) shall be controlled by dust socks.

(9 VAC 5-80-110 and Condition 3 of 07/13/2015 Permit)

84. **Tobacco Processing Equipment - BL Plant Limitations - Throughput -** The throughput of dry material to each process area, [Products A&B Dry Ingredient Preparation, Products A&B Drying – Line 4 and Line 5 (combined), and Products A&B Cutting, Cooling and Packing Area] shall not exceed 6005.25 BLPE units per year (dry basis), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110 and Condition 7 of 07/13/2015 Permit)

- 85. Tobacco Processing Equipment BL Plant Limitations Production The production of Product A shall not exceed 77,799.67 BLPA units per year (dry basis), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months. (9 VAC 5-80-110 and Condition 8 of 07/13/2015 Permit)
- 86. Tobacco Processing Equipment BL Plant Limitations Throughput The throughput of <u>liquid</u> material to Products A&B Wet Ingredient Preparation (AB Wet) shall not exceed 15,400,000 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-110 and Condition 9 of 07/13/2015 Permit)

87. Tobacco Processing Equipment - BL Plant Limitations - Throughput - The throughput of <u>liquid</u> material to Products A&B Slurry Production (AB Slurry) shall not exceed 17,500,000 gallons per year, calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.

(9 VAC 5-80-110 and Condition 10 of 07/13/2015 Permit)

88. Tobacco Processing Equipment - BL Plant Limitations - Emission Limits - Emissions

from the operation of Products A&B Dry Ingredient Preparation (AB Dry) shall not exceed the limits specified below:

 Particulate Matter (PM)
 2.2 lbs/hr
 5.1 tons/yr (9 VAC 5-50-260)

 PM-10
 2.2 lbs/hr
 5.1 tons/yr (9 VAC 5-50-260)

 Volatile Organic
 12.1 lbs/hr
 (9 VAC 5-50-260)

 Compounds
 (9 VAC 5-50-260)

Compounds

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 82 and 84.

(9 VAC 5-80-110 and Condition 11 of 07/13/2015 Permit)

89. Tobacco Processing Equipment - BL Plant Limitations - Emission Limits - Emissions from the operation of Products A&B Drying - Line 4 and Line 5 (L4D1, L4D2, L5D1, L5D2) (per line) shall not exceed the limits specified below:

Particulate Matter (PM)	1.8 lbs/hr	4.4 tons/yr (9 VAC 5-50-260)
PM-10	0.7 lbs/hr	2.0 tons/yr (9 VAC 5-50-260)
PM-2.5	0.6 lbs/hr	1.7 tons/yr (9 VAC 5-50-260)

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Volatile Organic Compounds 43.6 lbs/hr

(9 VAC 5-50-260)

(The above emissions are from the combination of fuel and dry ingredient throughputs. Emissions of NOx and CO from fuel throughput alone to the Products A&B Dryers are found in Condition 28).

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 26, 27, and 84.

(9 VAC 5-80-110 and Condition 12 of 07/13/2015 Permit)

90. **Tobacco Processing Equipment - BL Plant Limitations - Emission Limits -** Emissions from the operation of the Products A&B Cutting, Cooling, and Packing Area (AB Pkg) shall not exceed the limits specified below:

Particulate Matter (PM)	0.3 lbs/hr	0.6 tons/yr (9 VAC 5-50-260)
PM-10	0.3 lbs/hr	0.6 tons/yr (9 VAC 5-50-260)
PM-2.5	0.3 lbs/hr	0.6 tons/yr (9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Condition 84.

(9 VAC 5-80-110 and Condition 13 of 07/13/2015 Permit)

91. **Tobacco Processing Equipment - BL Plant Limitations** – Total permitted emissions from the BL facility shall not exceed the limits specified below:

Particulate Matter (PM)	6.1	lbs/hr	14.5	tons/yr (9 VAC 5-50-260)
PM-10	3.9	lbs/hr	9.6	tons/yr (9 VAC 5-50-260)
PM-2.5	3.8	lbs/hr	9.0	tons/yr (9 VAC 5-50-260)
Nitrogen Oxides (as NO ₂)	8.7	lbs/hr	28.6	tons/yr (9 VAC 5-50-260)
Carbon Monoxide	7.3	lbs/hr	24.1	tons/yr (9 VAC 5-50-260)
Volatile Organic Compounds	99.4	lbs/hr		(9 VAC 5-50-260)

These emissions are derived from the estimated overall emission contribution from operating limits. Exceedance of the operating limits may be considered credible evidence

of the exceedance of emission limits. Compliance with these emission limits may be determined as stated in Conditions 26, 27, 82, 83, 84, 86, 87, and 92. (9 VAC 5-80-110 and Condition 15 of 07/13/2015 Permit)

92. Tobacco Processing Equipment - BL Plant Limitations - Visible Emissions Limit - Visible emissions from the baghouses (BH-2a, BH-2b, BH-2c, BH-2d, BH-2e, & BH-2f) used to control particulate matter from Products A&B Dry Ingredient Preparation (AB Dry) shall not exceed 10 percent opacity as determined by the EPA Method 9 (reference 40 CFR 60, Appendix A). This condition applies at all times except during startup, shutdown, and malfunction.

(9 VAC 5-80-110 and Condition 16 of 07/13/2015 Permit)

Monitoring

- 93. Tobacco Processing Equipment BL Plant Monitoring The baghouses (BH-2a, BH-2b, BH-2c, BH-2d, BH-2e, & BH-2f) used to control particulate matter from Products A&B Dry Ingredient Preparation (AB Dry) shall be provided with adequate access for inspection and shall be in operation when the associated Products A&B Dry Ingredient Preparation processes (AB Dry) are operating.

 (9 VAC 5-80-110 and Condition 2 of 07/13/2015 Permit)
- 94. Tobacco Processing Equipment BL Plant Monitoring The dust socks (S1, S2, S3, S4, S5, and S6) used to control particulate matter from the six Storage Silos in Products A&B Dry Ingredient Preparation (AB Dry) shall be provided with adequate access for inspection and shall be in operation when the Silos are operating.
 (9 VAC 5-80-110 and Condition 3 of 07/13/2015 Permit)
- 95. Tobacco Processing Equipment BL Plant Monitoring Visible emissions from the baghouses (BH-2a, BH-2b, BH-2c, BH-2d, BH-2e, and BH-2f) shall be observed visually at least once a month for at least a brief time period during normal operations to determine if there are normal visible emissions (does not include condensed water vapor/steam), unless a 40 CFR 60 Appendix A Method 9 visible emissions evaluation is performed on the emissions unit. Each emissions unit observed having above normal visible emissions shall be followed up with a 40 CFR 60 Appendix A Method 9 visible emissions evaluation unless the visible emission condition is corrected as expeditiously as possible and recorded, and the cause and corrective measures taken are recorded.

 (9 VAC 5-80-110 E and F)
- 96. Tobacco Processing Equipment BL Plant Monitoring Compliance Assurance Monitoring (CAM) The permittee shall monitor, operate, calibrate and maintain the baghouses (BH-2a and BH-2c) controlling the Products A&B Dry Ingredient Preparation equipment (AB Dry) according to the following:

Pa	ge	3	1

Monitoring, Frequency, Records	Performance Criteria	Indicator Range; Averaging Period
A visual observation is to be performed each operating day	Visible emissions from the exhaust stack of each baghouse are to be monitored daily based on EPA Method 22-like procedures.	A monitoring excursion is indicated by the presence of visible emissions. If visible emissions are observed, equipment inspections and corrective actions are conducted.
Visual observations shall be recorded each operating day		

(9 VAC 5-80-110 E (Article 1) and 40 CFR 64.6 (c))

- 97. Tobacco Processing Equipment BL Plant Monitoring Compliance Assurance Monitoring (CAM) The permittee shall conduct the monitoring and fulfill the other obligations specified in 40 CFR 64.7 through 40 CFR 64.9.

 (9 VAC 5-80-110 E and 40 CFR 64.6 (c))
- 98. Tobacco Processing Equipment BL Plant Monitoring Compliance Assurance Monitoring (CAM) At all times, the permittee shall maintain the monitoring equipment, including, but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

 (9 VAC 5-80-110 E and 40 CFR 64.7 (b))
- 99. Tobacco Processing Equipment BL Plant Monitoring Compliance Assurance Monitoring (CAM) Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the BL Dry Ingredient Preparation equipment is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of compliance assurance monitoring, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by inadequate maintenance or improper operation are not malfunctions.

 (9 VAC 5-80-110 E and 40 CFR 64.7 (c))
- 100. Tobacco Processing Equipment BL Plant Monitoring Compliance Assurance Monitoring (CAM) Upon detecting an excursion or exceedance, the permittee shall restore operation of the BL Dry Ingredient Preparation equipment (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance

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(other than those caused by excused startup and shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator, designated condition, or below the applicable emission limitation or standard, as applicable.

(9 VAC 5-80-110 E and 40 CFR 64.7 (d)(1))

- 101. Tobacco Processing Equipment BL Plant Monitoring Compliance Assurance Monitoring (CAM) Determination that acceptable procedures were used in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. (9 VAC 5-80-110 E and 40 CFR 64.7(d)(2))
- 102. Tobacco Processing Equipment BL Plant Monitoring Compliance Assurance Monitoring (CAM) If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the Director, Piedmont Regional Office and, if necessary, submit a proposed modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (9 VAC 5-80-110 E and 40 CFR 64.7(e))
- 103. Tobacco Processing Equipment BL Plant Monitoring Compliance Assurance Monitoring (CAM) If the number of exceedances or excursions exceeds 5 percent duration of the operating time for the BL Dry Ingredient Preparation equipment for a semiannual reporting period, the permittee shall develop, implement and maintain a Quality Improvement Plan (QIP) in accordance with 40 CFR 64.8. If a QIP is required, the permittee shall have it available for inspection. The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following, as appropriate:
 - a. Improved preventative maintenance practices;
 - b. Process operation changes;
 - c. Appropriate improvements to control methods;
 - d. Other steps appropriate to correct control performance; and
 - e. More frequent or improved monitoring.
 - (9 VAC 5-80-110 E and 40 CFR 64.8(a) and (b))

Recordkeeping

- 104. **Tobacco Processing Equipment BL Plant Recordkeeping -** The permittee shall maintain records of emission data and operating parameters as necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Piedmont Region. These records shall include, but are not limited to:
 - a. Annual throughput of dry material to <u>each</u> process area [Products A&B Dry Ingredient Preparation, Products A&B Drying Line 4 and Line 5 (combined), and Products A&B Cutting, Cooling, and Packing Area], calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - b. Annual production of Product A (dry basis), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - c. Annual throughput of liquid material to the Products A&B Wet Ingredient Preparation (AB Wet), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - d. Annual throughput of liquid material to the Products A&B Slurry Production (AB Slurry), calculated monthly as the sum of each consecutive 12-month period. Compliance for the consecutive 12-month period shall be demonstrated monthly by adding the total for the most recently completed calendar month to the individual monthly totals for the preceding 11 months.
 - e. Visible emission observations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110 and Condition 19 of 07/13/2015 Permit)

Testing

105. **Tobacco Processing Equipment - BL Plant - Stack Tests -** Upon request by the DEQ, the permittee shall conduct additional performance tests for VOC from the dryer stack to demonstrate compliance with the emission limits contained in this permit. The details of the tests shall be arranged with the Piedmont Regional Office.

(9 VAC 5-80-110 and Condition 18 of 07/13/2015 Permit)

Limitations

- 106. Facility Wide Conditions Limitations VOC Work Practice Standards— At all times the disposal of volatile organic compounds shall be accomplished by taking measures, to the extent practicable, consistent with air pollution control practices for minimizing emissions. Volatile organic compounds shall not be intentionally spilled, discarded in sewers which are not connected to a treatment plant, or stored in open containers, or handled in any other manner that would result in evaporation beyond that consistent with air pollution practices for minimizing emissions.

 (9 VAC 5-80-110 and Condition 4 of 07/13/2015 permit)
- 107. Facility Wide Conditions Limitations -Net Annual VOC Emission Limits –
 Regardless of any VOC emission limit in any other active permit at the Park 500/Blended
 Leaf facility, the net change in VOC emissions at the Park 500/Blended Leaf facility shall be in compliance with the formula specified below:

 $\{ [(BL_{AB~throughput})(BL_{AB~EF})] + [(RL_{dom~EF})(RL_{dom~throughput} - 4148.2~P5CA~units)] + [(RL_{exp~EF})(RL_{exp~throughput} - 9,342,609~P5CB~units)] + [(RL_{other~throughput})(RL_{other~EF})] \} \\ \leq 35~tons/yr$

Where.

BL_{ABthroughput} is the throughput of Products A&B in BLPE units/yr through the Blended Leaf portion of the facility

RL_{dom throughput} is the throughput of RL domestic in P5CA units/yr at the Park 500 portion of the facility

RL_{exp throughput} is the throughput of RL export in P5CB units/yr at the Park 500 portion of the facility

 $RL_{other\ throughput}$ is the throughput of products other than those listed above in other units at the facility produced at the current RL facility without modification of the facility.

BL_{AB EF} is the emission factor for products A and B at the Blended Leaf portion of the facility

RL_{dom EF} is the emission factor for RL domestic production at the Park 500 portion of the facility

RL_{exp EF} is the emission factor for RL export production at the Park 500 portion of the facility

RL_{other EF} is the emission factor for processes other than those listed above at the facility

4148.2 P5CA units is the baseline throughput of RL domestic product from November 2001 through October 2003 used to determine past actual baseline emissions

9,342,609 P5CB units is the baseline throughput of RL export product from November 2001 through October 2003 used to determine past actual baseline emissions

Emissions shall be calculated monthly as the sum of each consecutive 12-month period. All sources or derivations of emission factors used in the above equation shall be recorded. These records shall be available for inspection.

(9 VAC 5-80-110 and Condition 14 of 07/13/2015 permit)

Monitoring and Recordkeeping

108. Facility Wide Conditions - Monitoring and Recordkeeping - Philip Morris shall maintain records of all operating parameters necessary to demonstrate compliance. These

records shall be maintained for all processes and include, but are not limited to the following:

- a. Annual throughput records for all tobacco processing equipment at the affected facility (RL Plant).
- b. Annual emission estimates for all tobacco processing equipment at the affected facility (RL Plant).
- c. Annual VOC emissions from the BL and RL processes, calculated monthly as the sum of each consecutive 12-month period, to determine compliance with Condition 107, using calculation methods approved by the Piedmont Region. The source or derivation of all emission factors used to determine compliance with Condition 107 shall be documented.
- d. Material Safety Data Sheets (MSDS) showing VOC content for each VOC-containing liquid material used.
- e. Scheduled and unscheduled maintenance, and operator training for all emission units and air pollution control equipment.
- f. Results of all stack tests, visible emission evaluations, and performance evaluations.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years.

(9 VAC 5-80-110, Condition 3 of Section E of VOC RACT Order dated 3/26/97, Condition 14 of 07/30/2015 Permit, Condition 25 of 2/12/14 Permit, Condition 19 of 10/31/14 Permit, and Condition 19 of 07/13/2015 Permit)

Testing

109. Facility Wide Conditions - Testing/Monitoring Ports - The permitted facility shall be constructed so as to allow for emissions testing and monitoring upon reasonable notice at any time, using appropriate methods. This includes constructing the equipment such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and providing a stack or duct that is free from cyclonic flow. Sampling/test ports shall be provided when requested at the appropriate locations and safe sampling platforms and access shall be provided.

(9 VAC 5-80-110, Condition 21 of 2/12/14 Permit, Condition 9 of 07/30/2015 Permit, Condition 17 of 7/13/2015 Permit, and Condition 4 of 8/19/04 Permit)

Insignificant Emission Units

110. The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted	Rated Capacity	
Fuel Burning Equipment					
BO0601	Natural Gas boiler (1985)	9 VAC 5-80-720.C.2.a	NO _x , CO	9.97 mmBtu/hr	
L2DD0101	RL Line 2 Yankee Dryer hood burners (two)	9 VAC 5-80-720.C.2.a	NO _x , CO	9.2 mmBtu/hr total	
StorageTanks					
B1					
TK1001	Em. Generator Day Tank	9 VAC 5-80-720 B	VOC	NA	
TK1201	No.2 Fuel Oil, Bulk Storage	9 VAC 5-80-720 B	VOC	NA	
TK0801	Used Oil	9 VAC 5-80-720 B	VOC	NA	
B2					
TK0601	Lube Oil Reservoir	9 VAC 5-80-720 B	VOC	N/A	
TK0602	Lube Oil Conditioner	9 VAC 5-80-720 C	VOC	155 gal.	
TK0701	Lube Oil Reservoir	9 VAC 5-80-720 B	VOC	N/A	
TK0702	Lube Oil Conditioner	9 VAC 5-80-720 C	VOC	215 gal.	
L1				<u> </u>	
TK2901	Emerg. Fire Pump Day Tank	9 VAC 5-80-720 B	VOC	NA	
W1				1	
TK0601	Generator, Bulk Storage	9 VAC 5-80-720 B	VOC	NA	
TK0701	Unleaded Gasoline	9 VAC 5-80-720 B	VOC	NA	
TK0801	Vehicle Fueling Diesel Tank	9 VAC 5-80-720 B	VOC	NA	
TK0501	WTP Gen. Day Tank	9 VAC 5-80-720 B	VOC	NA	
PX0101	WTP Gen. SupplyLine	9 VAC 5-80-720 B	VOC	NA	
W2		, , , , , , , , , , , , , , , , , , ,	L	<u> </u>	
TK0201, TK0501 & 0502, TK1101	Bulk Storage Tanks	9 VAC 5-80-720 B	VOC	NA	
TK0701	WWTP Generator Day Tank	9 VAC 5-80-720 B	VOC	NA	
PX0101	WWTP Generator Supply Line	9 VAC 5-80-720 B	VOC	NA	
MT0401-0402	WWTP Day Tanks	9 VAC 5-80-720 B	VOC	NA	
Process Equipment		· · · · · · · · · · · · · · · · · · ·			
L1					
MT0101-0102	Tanks	9 VAC 5-80-720 B	VOC	NA	
TK0101	Tank	9 VAC 5-80-720 B	VOC	NA	
TK0201	Tank	9 VAC 5-80-720 B	VOC	NA	
TK2501-2503,		ALL PLANTS.		N- 100 - 100	
TK2401-2403,	Tanks	9 VAC 5-80-720 B	voc	NA	
MT0201-0202					
SS0101-0104	Screens	9 VAC 5-80-720 B	VOC	NA	
TK0301	Tank	9 VAC 5-80-720 B	VOC	NA	
TK0401-0402	Feed Tanks	9 VAC 5-80-720 B	VOC	NA	
TK1501	Level Box	9 VAC 5-80-720 B	VOC	NA	

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted	Rated Capacity
SK0101-0102	Rejects Tanks	9 VAC 5-80-720 B	VOC	NA
EV0101-0103	Evaporators	9 VAC 5-80-720 B	VOC	NA
ST0101	Tank	9 VAC 5-80-720 B	VOC	NA
CT0101-0102	Cooling Towers	9 VAC 5-80-720 B	VOC	NA
TK0601-0602	Feed Tanks	9 VAC 5-80-720 B	VOC	NA
TK1601, 1701 & 1801	Standpipes	9 VAC 5-80-720 B	VOC	NA
TK2201	Tank	9 VAC 5-80-720 B	VOC	NA
TK0701-TK0702, TK1101-1103, TK0501	Tanks	9 VAC 5-80-720 B	VOC	NA
TK0801, 0901, 1401, BX0101,0201, 0301, FP0101, SS0201 & LD0101	Sheet Forming Equipment	9 VAC 5-80-720 B	VOC	NA
TK1301	Scrubber Tank	9 VAC 5-80-720 B	VOC	NA
SK0201-0202, TK1001-1002	Tanks	9 VAC 5-80-720 B	VOC	NA
ST0201	Tank	9 VAC 5-80-720 B	VOC	NA
L 2				
MT0101-0102	Tanks	9 VAC 5-80-720 B	VOC	NA
TK0101	Tank	9 VAC 5-80-720 B	VOC	NA
TK2201	Tank	9 VAC 5-80-720 B	VOC	NA
TK0201	Tank	9 VAC 5-80-720 B	VOC	NA
TK3101-3103, TK2301-2303, MT0201-0202	Tanks	9 VAC 5-80-720 B	VOC	NA
SS0101-0104	Screens	9 VAC 5-80-720 B	VOC	NA
TK0301	Tank	9 VAC 5-80-720 B	VOC	NA
TK0401-0402	Feed Tanks	9 VAC 5-80-720 B	VOC	NA
TK1501	Level Box	9 VAC 5-80-720 B	VOC	NA
SK0101-0102	Rejects Tanks	9 VAC 5-80-720 B	VOC	NA
EV0101-0103	Evaporators	9 VAC 5-80-720 B	VOC	NA
ST0101	Tank	9 VAC 5-80-720 B	VOC	NA
CT0101-0102	Cooling Towers	9 VAC 5-80-720 B	VOC	NA
TK0601-0602	Feed Tanks	9 VAC 5-80-720 B	VOC	NA
TK1801, 1901 & 2001	Standpipes	9 VAC 5-80-720 B	VOC	NA
TK1701	Tank	9 VAC 5-80-720 B	VOC	NA
TK1301	Supply Tank	9 VAC 5-80-720 B	VOC	NA
TK0701-0702, TK1101-1103, TK0501	Tanks	9 VAC 5-80-720 B	VOC	NA
MT0301, TK1201,				

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				1 age 30
Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted	Rated Capacity
TK0801, 0901, 1401, BX0101, 0201, 0301, FP0101; SS0201, LD0101	Sheet Forming Equipment	9 VAC 5-80-720 B	VOC	NA
TK2901	Scrubber Tank	9 VAC 5-80-720 B	VOC	NA
SK0201-0202, TK1001-1002	Tanks	9 VAC 5-80-720 B	VOC	NA
ST0201	Tank	9 VAC 5-80-720 B	VOC	NA
CT0201	Cooling Tower	9 VAC 5-80-720 B	VOC	NA
Flavor Preparation (
TK4201, TK4202	Tanks	9 VAC 5-80-720 B	VOC	NA
TK4001-4101,	Tanks	9 VAC 5-80-720 B	VOC	NA
TK4301	Flavor Tank	9 VAC 5-80-720 B	VOC	NA
TK4401	Tank (not in service)	9 VAC 5-80-720 B	VOC	NA
TK4701-4702, TK4801-4802	Bulk Storage Tanks	9 VAC 5-80-720 B	VOC	NA
W2				
TK0101-0102	WWTP Equalization Basins	9 VAC 5-80-720 B	VOC	NA
LD0101-0102, LD0201-0202, LD0301-0302, LD0401-0405, LD0501-0503	WWTP Bar Racks, Grit Chambers, Screens, Primary Clarifiers, and Thickeners	9 VAC 5-80-720 B	VOC	NA
MT0101-0105	WWTP Aeration Basins	9 VAC 5-80-720 B	VOC	NA
MT0201	WWTP Flocculation Tank	9 VAC 5-80-720 B	VOC	NA
LD0601-0606	WWTP Secondary Clarifiers	9 VAC 5-80-720 B	VOC	NA
MT0301-0302	WWTP Chlorine Contact Tanks	9 VAC 5-80-720 B	VOC	NA
SF0301-0306	WWTP Gravity Filters	9 VAC 5-80-720 B	VOC	NA
MT0501, TK0901	Tanks	9 VAC 5-80-720 B	VOC	NA
Miscellaneous Oper				
EH0101-0103	Maintenance Shop Exhaust Hoods	9 VAC 5-80-720 B	VOC, PM, PM ₁₀	NA
Various	Shop Parts Washers	9 VAC 5-80-720 B	VOC	NA
Various	Hydraulic Oil Tanks	9 VAC 5-80-720 B	VOC	NA

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

Permit Shield & Inapplicable Requirements

111. Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and

conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR Part 60 Subpart JJJJ	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines	All generators are compression ignition engines.
40 CFR Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters	Facility is an area source for HAP since the removal of all the coal boilers.
9 VAC 5-40-20.A.4	Compliance with Opacity Standard for existing sources	9 VAC 5-40-20 A 4 cannot be included in any Title V permit. This portion of the regulation is not part of the federally approved state implementation plan. The opacity standard applies to existing sources at all times including startup, shutdown, and malfunction.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by (i) the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

General Conditions

- 112. General Conditions Federal Enforceability All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

 (9 VAC 5-80-110 N)
- 113. General Conditions Permit Expiration- This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.
 - a. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.

- b. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- c. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- d. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- e. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.
- (9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

114. General Conditions - Recordkeeping and Reporting

- a. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
 - i. The date, place as defined in the permit, and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.
- c. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than March 1 and September 1 of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- i. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
- ii. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
 - (a) Exceedance of emissions limitations or operational restrictions.
 - (b) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
 - (c) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.
- d. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

- 115. General Conditions Annual Compliance Certification Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
 - a. The time period included in the certification. The time period to be addressed is January 1 to December 31.
 - b. The identification of each term or condition of the permit that is the basis of the certification.
 - c. The compliance status.
 - d. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
 - e. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
 - f. Such other facts as the permit may require to determine the compliance status of the source.

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g. One copy of the annual compliance certification shall be sent to EPA at the following address:

R3_APD_Permits@epa.gov (9 VAC 5-80-110 K.5)

- 116. General Conditions Permit Deviation Reporting The permittee shall notify the Director, Piedmont Regional Office within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition 114 permit. (9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)
- 117. General Conditions Failure/Malfunction Reporting In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Piedmont Regional Office by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. Owners subject to the requirements of 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not required to provide the written statement prescribed in this paragraph for facilities subject to the monitoring requirements of 9 VAC 5-40-40 and 9 VAC 5-50-40. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Piedmont Regional Office.

(9 VAC 5-20-180 C)

- a. The emission units that have continuous monitors subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C are not subject to the 14 day written notification.
- b. The emission units subject to the reporting and the procedure requirements of 9 VAC 5-40-50 C and the procedures of 9 VAC 5-50-50 C are listed below:
 - i. Boiler 1 (BO0501)
 - ii. Boiler 3 (BO0302)
 - iii. Boiler 5 (BO0701)
- c. Each owner required to install a continuous monitoring system subject to 9 VAC 5-40-41 or 9 VAC 5-50-410 shall submit a written report of excess emissions (as defined in

the applicable emission standard) to the board for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter and shall include the following information:

- d. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h) or 9 VAC 5-40-41 B 6, any conversion factors used, and the date and time of commencement and completion of each period of excess emissions;
- e. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the source. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted;
- f. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments; and
- g. When no excess emissions have occurred or the continuous monitoring systems have not been inoperative, repaired or adjusted, such information shall be stated in the report.

All malfunctions of emission units not subject to 9 VAC 5-40-50 C and 9 VAC 5-50-50 C require written reports within 14 days of the discovery of the malfunction. (9 VAC 5-20-180 C and 9 VAC 5-50-50)

- 118. **General Conditions Severability -** The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit. (9 VAC 5-80-110 G.1)
- 119. **General Conditions Duty to Comply -** The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application. (9 VAC 5-80-110 G.2)
- 120. General Conditions Need to Halt or Reduce Activity not a Defense It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

 (9 VAC 5-80-110 G.3)
- 121. **General Conditions Permit Modification** A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios.

(9 VAC 5-80-190 and 9 VAC 5-80-260)

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122. General Conditions - Property Rights - The permit does not convey any property rights of any sort, or any exclusive privilege.

(9 VAC 5-80-110 G.5)

123. General Conditions - Duty to Submit Information

- a. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality. (9 VAC 5-80-110 G.6)
- b. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

(9 VAC 5-80-110 K.1)

124. General Conditions - Duty to Pay Permit Fees - The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department.

(9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

- 125. General Conditions Fugitive Dust Emission Standards During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:
 - a. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
 - b. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
 - c. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;

- d. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- e. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.
 (9 VAC 5-50-90)
- 126. General Conditions Startup, Shutdown, and Malfunction At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

 (9 VAC 5-50-20 E)
- 127. **General Conditions Alternative Operating Scenarios -** Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)
- 128. General Conditions Inspection and Entry Requirements The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:
 - a. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
 - d. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.
 (9 VAC 5-80-110 K.2)
- 129. **General Conditions Reopening For Cause -** The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18

months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- a. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- b. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- c. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D. (9 VAC 5-80-110 L)
- 130. General Conditions Permit Availability Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-150 E)

131. General Conditions - Transfer of Permits

- a. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another.
- (9 VAC 5-80-160)
- b. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200.
- (9 VAC 5-80-160)
- c. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200.
- (9 VAC 5-80-160)

132. General Conditions - Malfunction as an Affirmative Defense

a. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph b of this condition are met.

- b. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
 - i. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
 - ii. The permitted facility was at the time being properly operated.
 - iii. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
 - iv. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- c. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- d. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.
 (9 VAC 5-80-250)
- 133. General Conditions Permit Revocation or Termination for Cause A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations.
 - (9 VAC 5-80-190 C and 9 VAC 5-80-260)
- 134. General Conditions Duty to Supplement or Correct Application Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-80 E)

- 135. General Conditions Stratospheric Ozone Protection If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F. (40 CFR Part 82, Subparts A-F)
- 136. General Conditions Asbestos Requirements The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150). (9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)
- 137. General Conditions Accidental Release Prevention If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68. (40 CFR Part 68)
- 138. General Conditions Changes to Permits for Emissions Trading No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

 (9 VAC 5-80-110 I)
- 139. General Conditions Emissions Trading Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:
 - a. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
 - b. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
 - c. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)